

SUSTAINABLE PRODUCTIVITY BY AUTOMATED FLUID QUALITY

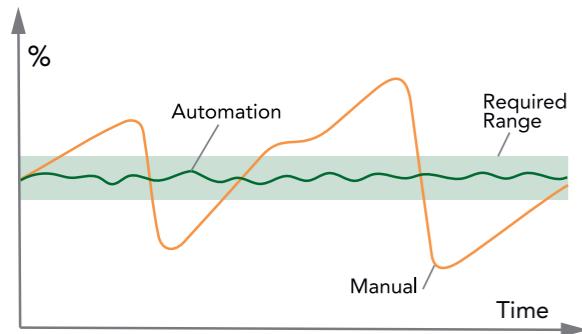
FluidWorker® 150

Fully automated control of concentration and chemical free bacteria prevention, keeps your metalworking fluids in optimal and safe condition.



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WATER INNOVATION

“Metalworking fluid maintenance is supposed to be part of the daily manual routines, but in reality these tasks are challenging to perform with quality. Incorrect fluid care causes: quality problems, production stops, poor work environment and unnecessary change-outs, which can represent 8-16% of the total production cost.



Fluid concentration with automation versus manual control



Fluid management automated by FluidWorker 150

Designed for modern metalworking

FluidWorker 150 is a compact plug & play system that keeps bacteria in coolants under control and automates your daily fluid management.

It measures, analyses and adjusts the most crucial fluid parameter: the concentration in water-soluble metalworking fluids. Status and measurements are available to your own fluid management system via ethernet/OPC UA. The system continuously monitors the fluid level and adjusts with the correct proportion of concentrate and water.

To make FluidWorker efficient, reliable and accurate with a minimum of maintenance, it is equipped with self-cleaning technologies. Furthermore, a magnetic filter removes small fines and contributes to a cleaner fluid. FluidWorker comes complete and is quick to install without stop in production.

FluidWorker® 150 helps workshops take fluid management to the next level by automation and implementing sustainable solutions.

Safe and trouble-free production



Bacterial prevention

Integrated UV based bacterial prevention keeps the fluid bio-stable without using hazardous biocides.

Select label free coolants and protect your employees from harmful chemicals.



Automated monitoring & control

Continuously measures, records, top-ups and mixes concentrate/water to required values and tank volume. Removes daily fluid maintenance and allows operators to focus on production.



Self-cleaning

Patented self-cleaning BRIX sensor and UV lamp makes the operation trouble-free.



Simple installation

Connect to water, fill the integrated concentrate tank or use your own barrel.



Industry 4.0

Ethernet and USB connection. FluidWorker is open to connect with your own organisation's fluid management system.



Sustainable productivity

Benefits of keeping metalworking fluids bacterial free and in optimal condition:

- Machine uptime, output, and quality is improved
- Indirect non-productive work tasks are minimized
- Machine and tool life is prolonged
- The improved work environment attracts qualified operators
- Fluid life is extended and production more sustainable
- Significant cost savings and boosted productivity

FluidWorker® 150

Automated Fluid Quality

Technical specification

| | |
|---|---------------------------------|
| Flow, adjustable | 3.9-5.6 m ³ /hour |
| Number of UV lamps | 1 |
| Power / Lamp power | 160-500 W / 0-220 W |
| Max ambient and fluid operating temperature | 45°C |
| Suitable tank volume (system and fluid dependent) | 0.2-1.5 m ³ |
| Fluid concentration | 2-15% BRIX |
| Concentrate viscosity | 5-200cSt (40°C) |
| Recommended fluids | Emulsions and micro emulsions |
| Self priming pump | Yes |
| Lockable on/off switch | Yes |
| Pressure sensor | Yes |
| Service timer | Yes |
| Automatic cleaning system | Yes |
| On/off via external signal | No |
| Weekly data / consumption | BRIX, Temp / Water, Concentrate |
| UV-Boost timer | Yes |
| Inlet strainer / Magnetic filter | Included / Included |
| Material reactor, inlet and outlet pipe | Stainless steel EN 1.4301 |
| Hose material, inside | NBR (fuel grade) |
| Sealings | FPM (Viton®) |
| IP-class | 21 |
| Chassi material | Painted steel (RAL7035) |
| Pump material | Epoxy coated cast iron |
| Power supply | 230V 1-phase, 50 Hz |
| HMI | 5" colour touch screen |
| Network | OPC-UA, Ethernet (RJ45) |
| USB | update and log |
| Concentrate tank size | 30L |
| Weight, including packing material | Approx. 70 kg |
| Inlet / outlet hose length | 1.8 m |
| Water hose length (included) | 2 m, ½" female |
| Electrical cable length | 3.7 m |

Patent pending, patented technology and registered FluidWorker® trademark are property of Wallenius Water Innovation AB.



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Wallenius Water Innovation is a Swedish company that develops sustainable and profitable solutions addressing significant health, safety, and environmental challenges within a variety of applications and industry segments. The main product families are, FluidWorker® which offers non-toxic and automated control of industrial process fluids, and AquaWorker® used for chemical free disinfection in water systems.

